

- Pregnancy
- Birth

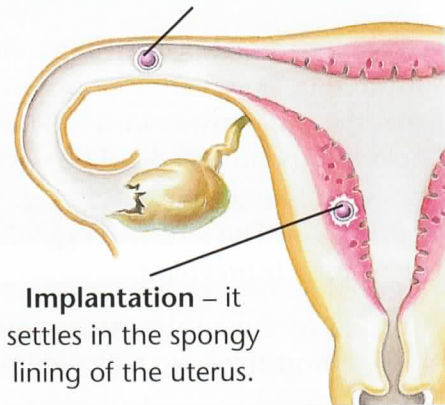
From egg to baby

After an egg is fertilised, it settles in the thick, soft lining of the uterus. This is called **implantation**.

The fertilised cell divides into 2, then 4, then 8 cells and so on, until there is a tiny ball of cells called the **embryo**. When this happens the woman is **pregnant**. The embryo then grows more to become a **fetus**.



The fertilised egg passes along the oviduct into the uterus.



Implantation – it settles in the spongy lining of the uterus.

- a** What happens to the egg after fertilisation?

The growing baby

The photos below show the development of the fetus during pregnancy. (The photos are not to scale.)



At about 4 weeks the embryo's heart starts to beat. It has eyes, ears and legs.



By about 9 weeks, the baby is called a fetus. It has a head, arms and legs. Fingers and toes start to develop.



At around 22 weeks, the doctor can hear the baby's heartbeat. Its lungs are starting to develop. Its mother will feel it kicking.



At 39 weeks, when it is born, the baby is fully developed. It has a lot of fat to keep it warm when it is born.

- b** What differences can you see between the pictures at 4 weeks and 39 weeks?
- c** Sometimes babies are born before 39 weeks, perhaps as early as 26 weeks. What special care do you think these babies need?

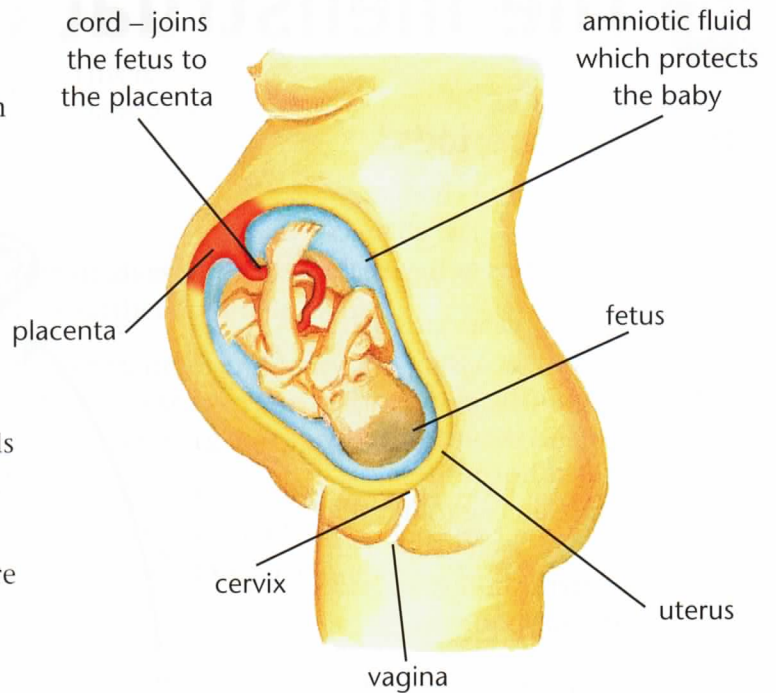
Getting what it needs

The fetus gets all the substances it needs from the mother's body, through the **placenta**. This forms in the uterus early in pregnancy. The **cord** joins the fetus to the placenta.

The blood in the cord carries food and oxygen to the fetus from the placenta, and it carries carbon dioxide and other waste substances back.

It is important for the mother to look after her health during pregnancy. For example, it is very dangerous for a mother to smoke. Harmful chemicals from the cigarette smoke can cross the placenta and harm the baby.

The diagram on the right shows the fetus just before birth. The fetus usually lies upside down with its arms tucked close to its body. This is the best position for an easy birth.



- d** How does the fetus get oxygen and food and remove waste such as carbon dioxide?

Birth

Pregnancy lasts for about nine months. Then the baby is born. It is pushed out of the uterus by **contractions**. These happen when the strong muscles of the uterus wall squeeze. The baby is usually born head-first. After the cord is cut, the newborn baby gets its oxygen from breathing air. The placenta leaves the uterus a few minutes later. This is called the **afterbirth**.

Depending on mother

The mother's body has to adapt ready for when the baby is born. Her breasts grow, preparing for breast feeding after birth. Breast milk is very nutritious. It contains **antibodies**. These are substances that protect the baby from catching common diseases.

Questions

- What is the job of each of these parts?
a amniotic fluid b cord c placenta d afterbirth.
- Why does the uterus wall need strong muscles?
- Describe the ways the mother's body changes during pregnancy.
- Why do you think that breast feeding is better than bottle feeding?
- Produce a leaflet explaining to parents how the baby develops inside the mother and how it is born after nine months.

For your notes:

- It takes nine months for a human baby to develop fully inside its mother. This is called **pregnancy**. The **fetus** is joined to the mother by the **cord** and the **placenta**.
- At birth, the baby is pushed out of the uterus by strong **contractions**. The placenta then leaves the uterus as **afterbirth**.
- Breast milk contains **antibodies** that protect the baby from catching common diseases.